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SECTION G - GENERAL CONDITIONS OF AGREEMENT

G.1 <u>DEFINITION OF TERMS</u>:

G.1.1 Owner, Contractor, and Engineer:

The OWNER, the CONTRACTOR and the ENGINEER are those persons or organizations identified as such in the Agreement and are referred to throughout the Contract Documents as if singular in number and masculine in gender.

The term ENGINEER means the ENGINEER or his duly authorized representative. The ENGINEER shall be understood to be the ENGINEER of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the ENGINEER and the CONTRACTOR.

The OWNER may include any authorized representative of OWNER as may be set forth in the Special Conditions.

G.1.2 Contract Documents:

The Contract Documents shall consist of the Advertisement for Proposals, Information for Bidders, Proposal, signed Agreement, Performance and Payment Bonds, Special Bonds (when required), General Conditions of the Agreement, Special Conditions of the Agreement, Technical Specifications, Plans, and all modifications thereof incorporated in any of the documents before the execution of the Agreement.

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In case of conflict between any of the Contract Documents, priority of interpretation shall be in the following order: signed Agreement, Performance and Payment Bonds, Special Bonds (if any), Proposal, Special Conditions of Agreement, Advertisement for Proposals, Technical Specifications, Plans, and General Conditions of Agreement.

G.1.3 Sub-Contractor:

The term Sub-Contractor, as employed herein, includes only those having a direct contract with the CONTRACTOR and it includes one who furnishes material worked to a special design according to the plans or specifications of this work, but does not include one who merely furnishes material not so worked.

G.1.4 Written Notice:

Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, return receipt requested, to the last business address known to him who gives the notice.

G.1.5 Work:

The CONTRACTOR shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, services, insurance, permits, certificates, licenses, and all water, light, power, fuel, transportation and other facilities necessary for the execution and completion of the work covered by the contract documents. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of a good quality. The CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials. Materials of work described in words, which so applied, have a well known technical or trade meaning shall be held to refer to such recognized standards.

G.1.6 Extra Work:

The term "Extra Work" as used in this contract shall be understood to mean and include all work that may be required by the OWNER or ENGINEER to be done by the CONTRACTOR to accomplish any change, alteration or addition to the work shown upon the plans, or reasonably implied by the specifications, and not covered by the CONTRACTOR'S Proposal.

G.1.7 Calendar Day:

"Calendar Day" is any day of the week or month, no days being excepted.

G.1.8 Substantially:

By the term "substantially completed" is meant that the structure has been made suitable for use or occupancy or the facility is in condition to serve its intended purpose, but still may require minor miscellaneous work and adjustment.

G.2 <u>RESPONSIBILITIES OF THE ENGINEER AND THE CONTRACTOR:</u>

G.2.1 Owner-Engineer Relationship:

The ENGINEER may be the OWNER'S representative during construction. The duties, responsibilities and limitations of authority of the ENGINEER as the OWNER'S representative during construction are as set forth in the Contract Documents and shall not be extended or limited without written consent of the OWNER and ENGINEER. The ENGINEER will advise and consult with the OWNER, and OWNER'S instructions to the CONTRACTOR shall be issued either through the OWNER or the ENGINEER.

G.2.2 Professional Inspection by Engineer:

The ENGINEER shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the ENGINEER shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the ENGINEER shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR'S or subcontractor's agents, servants or employees or any other person, firm or corporation performing or attempting to perform any of the work.

G.2.3 Payments for Work:

The OWNER or ENGINEER shall review CONTRACTOR'S applications for payment and supporting data, determine the amount owed to the CONTRACTOR and approve, in writing, payment to CONTRACTOR in such amounts; such approval of payment to CONTRACTOR constitutes a representation to the OWNER'S or ENGINEER'S professional judgment that the work has progressed to the point indicated to the best of his knowledge, information and belief, but such approval of an application for payment to CONTRACTOR shall not be deemed as a representation by OWNER or ENGINEER that OWNER or ENGINEER has made any examination to determine how or for what purpose CONTRACTOR has used the moneys paid on account of the Contract price.

G.2.4 Objections and Determinations:

The ENGINEER shall determine all claims disputes and other matters in question between the CONTRACTOR and the OWNER relating to the execution or progress of the work or the interpretation of the Contract Documents. The ENGINEER'S decision shall be rendered in writing within a reasonable time and shall be binding.

G.2.5 Contractor's Duty and Superintendence:

The CONTRACTOR shall give adequate attention to the faithful prosecution and completion of this contract and shall keep on the work, during its progress, a competent superintendent and any necessary assistants. The superintendent shall represent the CONTRACTOR in his absence and all directions given to him shall be as binding as if given to the CONTRACTOR.

The CONTRACTOR is and at all times shall remain an independent contractor, solely responsible for the manner and method of completing his work under this contract, with full power and authority to select the means, method and manner of performing such work, so long as such methods do not adversely affect the completed improvements, the OWNER and ENGINEER being interested only in the result obtained and conformity of such completed improvements to the Contract Documents.

Likewise, the CONTRACTOR shall be solely responsible for the safety of himself, his employees and other persons, as well as for the protection of the safety of the improvements being erected and the property of himself or any other person, as a result of his operations hereunder. Shop or working construction drawings and any specifications shown in relation thereto, as well as any additional information concerning the work to be performed, passing from or through the ENGINEER, shall not be interpreted as requiring or allowing CONTRACTOR to deviate from the plans and specifications, the intent of such drawings, specifications and any other such instructions being to define with particularity the agreement of the parties as to the work the CONTRACTOR is to perform. CONTRACTOR shall be fully and completely liable, at his own expense, for design, construction, installation and use, or non-use, of all items and methods incident to performance of the contract, and for all loss, damage or injury incident thereto, either to person or property, including, without limitation, the adequacy of all temporary supports, shoring, bracing, scaffolding, machinery or equipment, safety precautions or devices, and similar items or devices used by him during construction.

Any review of work in process, or any visit or observation during construction, or any clarification of plans and specifications, by the OWNER or ENGINEER, or any agent, employee, or representative of either of them, whether through personal observation on the project site or by means of approval of shop drawings for temporary construction or construction processes, or by other means or method, is agreed by the CONTRACTOR to be for the purpose of observing the extent and nature of work completed or being performed, as measured against the drawings and specifications constituting the contract, or for the purpose of enabling CONTRACTOR to more fully understand the plans and specifications so that the completed construction work will conform thereto, and shall in no way relieve the CONTRACTOR from full and complete responsibility for the proper performance of his work on the project, including but without limitation the propriety of means and methods of the CONTRACTOR in performing said contract, and the adequacy of any designs, plans or other facilities for accomplishing such performance. Deviation by the CONTRACTOR from plans and specifications that may have been in evidence during any such visitation or observation by the OWNER or ENGINEER, or any of his representatives, whether called to the CONTRACTOR'S attention or not, shall in no way relieve CONTRACTOR from his responsibility to complete all work in accordance with said plans and specifications.

G.2.6 Contractor's Understanding:

It is understood and agreed that the CONTRACTOR has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and

during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this contract. No verbal agreement or conversation with any officer, agent or employee of the OWNER or ENGINEER, either before or after the execution of this contact, shall affect or modify any of the terms or obligations herein contained.

G.2.7 Character of Workmen:

The CONTRACTOR agrees to employ only orderly and competent men, skillful in the performance of the type of work required under this contract, to do the work; and agrees that whenever the OWNER or ENGINEER shall inform him in writing that any man or men on the work are, in his opinion, incompetent, unfaithful or disorderly, such man or men shall be discharged from the work and shall not again be employed on the work without the OWNER'S or ENGINEER'S written consent.

G.2.8 Contractor's Buildings:

The building of structures for housing men, or the erection of tents or other forms of protection, will be permitted only at such places as the OWNER or ENGINEER shall direct, and the sanitary conditions of the grounds in or about such structures shall at all times be maintained in a manner satisfactory to the OWNER or ENGINEER.

G.2.9 Sanitation:

Necessary sanitary conveniences for the use of laborers on the work, properly secluded from public observation, shall be constructed and maintained by the CONTRACTOR in such manner and at such points as shall be approved by the OWNER or ENGINEER, and their use shall be strictly enforced.

G.2.10 Shop Drawings:

The CONTRACTOR shall submit to the OWNER or ENGINEER, with such promptness as to cause no delay in his own work or in that of any other contractor, four checked copies, unless otherwise specified, of all shop and/or setting drawings and schedules required for the work of the various trades, and the OWNER or ENGINEER shall pass upon them with reasonable promptness, noting desired corrections. The CONTRACTOR shall make any corrections required by the OWNER or ENGINEER, file with him two corrected copies and furnish such other copies as may be needed. The OWNER'S or ENGINEER'S approval of such drawings or schedules shall not relieve the CONTRACTOR from responsibility for deviations from drawings or specifications, unless he has in writing called the OWNER'S or ENGINEER'S attention to such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any sort in shop drawings or schedules. It shall be the CONTRACTOR'S responsibility to fully and completely review all shop drawings to ascertain their effect on his ability to perform the required contract work in accordance with the plans and specifications and within the contract time.

Such review by the OWNER or ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformity with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor as previously set forth, it being expressly understood and agreed that the OWNER or ENGINEER does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules, or any means or methods reflected thereby, in relation to the safety of either person or property during CONTRACTOR'S performance hereunder.

G.2.11 Preliminary Approval:

The OWNER or ENGINEER shall not have the power to waive the obligations of this contract for the furnishing by the CONTRACTOR of good material, and of his performing good work as herein described, in full accordance with the plans and specifications. No failure or omission of the OWNER or ENGINEER to discover, object to or condemn any defective work or material shall release the CONTRACTOR from the obligations to fully and properly perform the contract, including without limitation, the obligation to

at once tear out, remove and properly replace the same at any time prior to final acceptance upon the discovery of said defective work or material; provided, however, that the OWNER or ENGINEER shall, upon request of the CONTRACTOR, inspect and accept or reject any material furnished, and in event the material has been once accepted by the OWNER or ENGINEER, such acceptance shall be binding on the OWNER, unless it can be clearly shown that such material furnished does not meet the specifications for this work.

Any questioned work may be ordered taken up or removed for re-examination by the OWNER or ENGINEER prior to final acceptance, and if found not in accordance with the specifications for said work, all expense of removing, re-examination and replacement shall be borne by the CONTRACTOR, otherwise the expense thus incurred shall be allowed as EXTRA WORK, and shall be paid for by the OWNER; provided that, where inspection or approval is specifically required by the specifications prior to performance of certain work, should the CONTRACTOR proceed with such work without requesting in writing prior inspection or approval, he shall bear all expense of taking up, removing, and replacing this work if so directed by the OWNER or ENGINEER.

G.2.12 Defects and their Remedies:

It is further agreed that if the work or any part thereof, or any material brought on the site of the work for use in the work or selected for the same, shall be deemed by the OWNER or ENGINEER as unsuitable or not in conformity with the specifications, the CONTRACTOR shall, after receipt of written notice thereof from the OWNER or ENGINEER, forthwith remove such material and rebuild or otherwise remedy such work so that it shall be in full accordance with this contract.

G.2.13 Changes and Alterations:

The CONTRACTOR further agrees that the OWNER or ENGINEER may make such changes and alterations as the OWNER may see fit, in the line, grade, form, dimensions, plans or materials for the work herein contemplated, or any part thereof, either before or after the beginning of the construction, without affecting the validity of this contract and the accompany Performance and Payment Bonds.

If such changes or alterations diminish the quantity of the work to be done, they shall not constitute the basis for a claim for damages for anticipated profits on the work that may be dispensed with. If the amount of work is increased, such additional work shall be paid for as provided under Extra Work. In case the OWNER shall make such changes or alterations as shall make useless any work already done or material already furnished or used in said work, then the OWNER shall recompense the CONTRACTOR for any material or labor so used, and for any actual loss occasioned by such change, due to actual expenses incurred in preparation for the work as originally planned.

G.3 GENERAL OBLIGATIONS AND RESPONSIBILITIES:

G.3.1 Keeping Plans and Specifications Accessible:

The OWNER shall furnish the CONTRACTOR with an adequate and reasonable number of copies of all plans and specifications without expense to him, and the CONTRACTOR shall keep one copy of the same constantly accessible on the work, with the latest revisions noted thereon.

G.3.2 Ownership of Drawings:

All drawings, specifications and copies thereof furnished by the OWNER shall not be reused on other work, and, with the exception of the signed contract sets, are to be returned to him on request, at the completion of the work. All models are the property of the OWNER.

G.3.3 Adequacy of Design:

It is understood that the OWNER believes it has employed competent engineers and designers. It is,

therefore, agreed that, as to the CONTRACTOR only, the OWNER shall be responsible for the adequacy of the design, sufficiency of the Contract Documents, and the practicability of the operations of the completed project; provided the CONTRACTOR has complied with the requirements of the said Contract Documents, all approved modifications thereof, and additions and alterations thereto approved in writing by the OWNER. The burden of proof of such compliance shall be upon the CONTRACTOR to show that he has complied with the said requirements of the Contract Documents, approved modifications thereof and all approved additions and alterations thereto.

G.3.4 Right of Entry:

The OWNER reserves the right to enter the property or location on which the works herein contracted for are to be constructed or installed, by such agent or agents as he may elect, for the purpose of inspecting the work, or for the purpose of constructing or installing such collateral work as said OWNER may desire.

G.3.5 Collateral Contracts:

The OWNER agrees to provide by separate contract or otherwise, all labor and material essential to the completion of the work specifically excluded from this contract, in such manner as not to delay the progress of the work or damage said CONTRACTOR, except where such delays are specifically mentioned elsewhere in the Contract Documents.

G.3.6 Discrepancies and Omissions:

It is further agreed that it is the intent of this contract that all work must be done and all material must be furnished in accordance with the generally accepted practice, and in the event of any discrepancies between the separate contract documents, the priority of interpretation defined under "Contract Documents" shall govern. In the event that there is still any doubt as to the meaning and intent of any portion of the contract, specifications or drawings, the ENGINEER shall define which is intended to apply to the work.

G.3.7 Equipment, Materials, and Construction Plant

The CONTRACTOR shall be responsible for the care, preservation, conservation, protection and replacement of all materials, supplies, machinery, equipment, tools, apparatus, accessories, facilities, all means of construction, and any and all parts of the work, whether the CONTRACTOR has been paid, partially paid, or not paid for such work, or whether OWNER has taken possession of completed portions of such work, until the entire work is completed and accepted.

G.3.8 Protection Against Accidents to Employees and the Public:

The CONTRACTOR shall at all times exercise reasonable precautions for the safety of employees and others on or near the work and shall comply with all applicable provisions of Federal, State, and Municipal safety laws and building and construction codes. All machinery and equipment and other physical hazards shall be guarded in accordance with the "Manual of Accident Prevention in Construction" of the Associated General contractors of America except where incompatible with Federal, State, or Municipal laws or regulations. The CONTRACTOR shall provide such machinery guards, safe walkways, ladders, bridges, gangplanks, and other safety devices. The safety precautions actually taken and their adequacy shall be the sole responsibility of the CONTRACTOR, acting at his discretion as an independent contractor.

G.3.9 Performance and Payment Bonds:

Unless otherwise specified, it is further agreed by the parties to this Contract that the CONTRACTOR will execute separate performance and payment bonds, each in the sum of one hundred (100) percent of the total contract price, in standard forms for this purpose, guaranteeing faithful performance of the work and the fulfillment of any guarantees required, and further guaranteeing payment to all persons

supplying labor and materials or furnishing him any equipment in the execution of the Contract, and it is agreed that this contract shall not be in effect until such performance and payment bonds are furnished and approved by the OWNER.

Unless otherwise approved in writing by the OWNER, the surety company underwriting the bonds shall be acceptable according to the latest list of companies holding certificates of authority from the appropriate authority of the State of Texas.

Unless otherwise stated, the cost of the premium for the performance and payment bonds shall be included in the CONTRACTOR'S proposal.

G.3.10 Losses from Natural Causes:

Unless otherwise specified, all loss or damage to the CONTRACTOR arising out of the nature of the work to be done, or from the action of the elements, or from any unforeseen circumstance in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the work, shall be sustained and borne by the CONTRACTOR at his own cost and expense.

G.3.11 Protection of Adjoining Property:

The CONTRACTOR shall take proper means to protect the adjacent or adjoining property or properties in any way encountered, which might be injured or seriously affected by any process of construction to be undertaken under this Agreement, from any damage or injury by reason of said process of construction; and he shall be liable for any and all claims for such damage on account of his failure to fully protect all adjoining property. The CONTRACTOR agrees to indemnify, save and hold harmless the OWNER and ENGINEER against any claim or claims for damages due to any injury to any adjacent or adjoining property, arising or growing out of the performance of the contract.

G.3.12 Protection Against Claims:

The CONTRACTOR agrees that he will indemnify and save the OWNER and ENGINEER harmless from all claims growing out of the demands of sub-contractors, laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract, regardless whether caused wholly or in part by the negligence or gross negligence of any party indemnified hereunder and regardless of the application of any worker's compensation or similar statute which might apply to any employees or agents of the CONTRACTOR or any Subcontractor. When so desired by the OWNER, the CONTRACTOR shall furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged or waived. If the CONTRACTOR fails so to do, then the OWNER may, at its sole option, either pay directly any unpaid bills of which the OWNER has written notice and deduct such amount from the next partial payment due to CONTRACTOR, or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to liquidate any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payments to the CONTRACTOR shall be resumed in full in accordance with the terms of this contract; but in no event shall the provisions of this sentence be construed to impose any obligation upon the OWNER by either the CONTRACTOR or his Surety.

G.3.13 Protection Against Royalties or Patented Invention:

The CONTRACTOR shall pay all royalties and license fees, and shall provide for the use of any design, device, material or process covered by letters patent or copyright by suitable legal agreement with the patentee or owner. The CONTRACTOR shall defend all suits or claims for infringement of any patent or copyright rights and shall indemnify and save the OWNER and ENGINEER harmless from any loss on account thereof, except that the OWNER shall defend all such suits and claims and shall be responsible for all such loss when a particular design, device, material or process or the product of a particular manufacturer or manufacturers is specified or required by the OWNER; provided, however, if choice of alternate design, device, material or process is allowed to the CONTRACTOR, then CONTRACTOR shall indemnify and save OWNER harmless from any loss on account thereof. If the material or process specified or required by the OWNER is an infringement, the CONTRACTOR shall be responsible for such loss unless he promptly gives such information to the OWNER.

G.3.14 Laws and Ordinances:

The CONTRACTOR shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations, which in any manner affect the contract or the work, and shall indemnify and save harmless the OWNER and ENGINEER against any claim arising from the violation of any such laws, ordinances, and regulations whether by the CONTRACTOR or his employees, except where such violations are called for by the provisions of the Contract Documents. If the CONTRACTOR observes that the plans and specifications are at variance therewith, he shall promptly notify the OWNER or ENGINEER in writing, and any necessary changes shall be adjusted as provided in the contract for changes in the work. If the CONTRACTOR performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the OWNER or ENGINEER, he shall bear all costs arising therefrom. In case the OWNER is a body politic and corporate, the law from which it derives its powers, insofar as the same regulates the objects for which, or the manner in which, or the conditions under which the OWNER may enter into contract, shall be controlling, and shall be considered as part of this contract, to the same effect as though embodied herein.

G.3.15 Assignment and Subletting:

The CONTRACTOR further agrees that he will retain personal control and will give his personal attention to the fulfillment of this contract and that he will not assign by Power of Attorney, or otherwise, or sublet said contract without the written consent of the OWNER or ENGINEER, and that no part or feature of the work will be sublet to anyone objectionable to the ENGINEER or the OWNER. The CONTRACTOR further agrees that the subletting of any portion or feature of the work, or materials required in the performance of this contract, shall not relieve the CONTRACTOR from his full obligations to the OWNER, as provided by this Agreement.

G.3.16 Indemnification:

The CONTRACTOR shall defend, indemnify and hold harmless the OWNER and the ENGINEER and their respective officers, agents and employees, from and against all damages, claims, losses, demands, suits, judgments and costs, including reasonable attorneys' fees and expenses, arising out of or resulting form the performance of the work, provided that any such damages, claim, loss, demand, suit, judgment, cost or expense:

Is attributable to bodily injury, sickness, disease or death or to injury or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and,

Is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, the Owner, anyone directly or indirectly employed by any one of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

The obligation of the CONTRACTOR under this Paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, drawings, reports, surveys, Change Orders, designs or specifications, or the giving of or the failure to give directions or instructions by the ENGINEER, his agents or employees, provided such giving or failure to give is the primary cause of the injury or damage.

G.3.17 Insurance:

The CONTRACTOR at his own expense shall purchase, maintain and keep in force such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S operations under the Contract, whether such operations be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable, including the acts of OWNER:

- A. Workmen's compensation claims, disability benefits and other similar employee benefit acts;
- B. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees, and claims insured by usual bodily injury liability coverage;
- C. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees, and claims insured by usual bodily injury liability coverage;
- D. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from.

G.3.18 Policies of Insurance:

Before commencing any of the work, the CONTRACTOR shall file with the OWNER valid Policies of Insurance acceptable to the OWNER and the ENGINEER. Such Policies shall contain a provision that coverage afforded under the Policies will not be canceled until at least thirty days' prior written notice has been given to the OWNER.

The CONTRACTOR shall also file with the OWNER valid Policies of Insurance covering all sub-contractors.

G.3.19 Waiver of Subrogation:

CONTRACTOR, its agents, employees and subcontractors, hereby waive any and all rights of subrogation against OWNER or ENGINEER arising out of any claim or incident for which insurance coverage or indemnification is required under the Contract Documents.

G.4 PROSECUTION AND PROGRESS:

G.4.1 Time and Order of Completion:

It is the meaning and intent of this contract, unless otherwise herein specifically provided, that the CONTRACTOR shall be allowed to prosecute his work at such times and seasons, in such order of precedence, and in such manner as shall be most conducive to economy of construction; provided however, that the order and the time of prosecution shall be such that the work shall be substantially completed as a whole and in part in accordance with this contract, the plans and specifications, and within the time of completion designated in the Proposal; provided, also, that when the OWNER is having other work done, either by contract or by his own force, the ENGINEER may direct the time and manner of constructing the work done under this contract, so that conflict will be avoided and the construction of the various works being done for the OWNER shall be harmonized.

The CONTRACTOR shall submit, at such times as may reasonably be requested by the OWNER or ENGINEER, schedules which shall show the order in which the CONTRACTOR proposes to carry on the work, with dates at which the CONTRACTOR will start the several parts of the work, and estimated dates of completion of the several parts.

G.4.2 Extension of Time:

Should the CONTRACTOR be delayed in the completion of the work by any act or neglect of the OWNER or ENGINEER, or of any employee of either, or by other contractors employed by the OWNER, or by changes ordered in the work, or by strikes, lockouts, fires, and unusual delays by common carriers, or uncontrollable cause or causes beyond the CONTRACTOR'S control, and the OWNER or ENGINEER decides such cause justifies the delay, then an extension of time sufficient to compensate for the delay as determined by the OWNER or ENGINEER shall be allowed for completing the work; provided, however, that the CONTRACTOR shall give the OWNER or ENGINEER prompt notice in writing of the cause of such delay.

G.4.3 Hindrances and Delays:

No claims shall be made by the CONTRACTOR for damages resulting from hindrances or delays from any cause (except where the work is stopped by order of the OWNER) during the progress of any portion of the work embraced in this contract. In case said work shall be stopped by the act of the OWNER, then such expense as in the judgment of the ENGINEER is caused by such stoppage of said work shall be paid by the OWNER to the CONTRACTOR.

G.5 MEASUREMENT AND PAYMENT:

G.5.1 Quantities and Measurements:

No extra or customary measurements of any kind will be allowed, but the actual measured and/or computed length, area, solid contents, number and weight only shall be considered, unless otherwise specifically provided.

G.5.2 Estimated Quantities:

This agreement, including the specifications and plans, is intended to show clearly all work to be done and material to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this contract may differ somewhat from these estimates.

G.5.3 Price of Work:

In consideration of the furnishing of all the necessary labor, equipment and material, and the completion of all work by the CONTRACTOR, and on the completion of all work and of the delivery of all material embraced in this Contract in full conformity with the specifications and stipulations herein contained, the OWNER agrees to pay the CONTRACTOR the prices set forth in the Proposal hereto attached, which has been made a part of this contract. The CONTRACTOR hereby agrees to receive such prices in full payment for furnishing all material and all labor required for the aforesaid work, also for all expense incurred by him, and for well and truly performing the same and the whole thereof in the manner and according to this Agreement.

G.5.4 Partial Payments:

On or before the 25th day of each month, the CONTRACTOR shall prepare and submit to the OWNER an application for payment showing as completely as practicable the total value of the work done by the CONTRACTOR up to and including the last day immediately preceding the date of such application and the value of all sound materials delivered on the site of the work that are to be fabricated into the work. In addition an updated construction schedule shall be submitted in an electronic format acceptable to the OWNER.

The OWNER or ENGINEER shall verify CONTRACTOR'S application, shall either approve or modify the total value of the work done by CONTRACTOR and the value of materials delivered on the site, and shall submit to OWNER such application for payment as approved or modified with OWNER'S and/or ENGINEER'S verification affixed thereto on or before the 5th day of the month following the receipt of the application from CONTRACTOR.

The OWNER shall pay the CONTRACTOR on or before the 20th day of the month in which the OWNER receives the approved application from the OWNER or ENGINEER the total amount of the approved and verified application, less 5 percent of the amount thereof, which 5 percent shall be retained until final payment, and further less all previous payments and all further sums that may be retained by the OWNER under the terms of this Agreement. It is understood, however, that in case the whole work be

near to completion and some unexpected and unusual delay occurs due to no fault or neglect on the part of the CONTRACTOR, the OWNER may, upon written recommendation of the ENGINEER, pay a reasonable and equitable portion of the retainage to the CONTRACTOR, or the CONTRACTOR at the OWNER'S option, may be relieved of the obligation to fully complete the work and, thereupon, the CONTRACTOR shall receive payment of the balance due him under the contract subject only to the conditions stated under "Final Payment." Any such payments of retainage by OWNER to CONTRACTOR prior to final payment must be agreed to in writing by the surety or sureties on CONTRACTOR'S payment and performance bonds.

The Contractor shall submit to the OWNER, copies of the material invoices with the application for payment. No payment will be made to the CONTRACTOR until the quantities of work submitted have been checked and verified by the OWNER or ENGINEER.

G.5.5 Use of Completed Portions:

The OWNER shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work or such portions may not have expired. Such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents, nor shall the risk of loss change from CONTRACTOR to OWNER. If such prior use increases the cost of or delays the work, the CONTRACTOR shall be entitled to such extra compensation, or extension of time, or both, as the OWNER or ENGINEER may determine.

G.5.6 Final Completion and Acceptance:

The CONTRACTOR shall notify the OWNER or ENGINEER when, in the CONTRACTOR'S opinion, the contract is "substantially completed" and when so notifying the OWNER or ENGINEER, the CONTRACTOR shall furnish to the OWNER or ENGINEER in writing a detailed list of unfinished work. The OWNER or ENGINEER will review the CONTRACTOR'S list of unfinished work and will add thereto such items as the CONTRACTOR has failed to include. The substantial completion of the structure or facility shall not excuse the CONTRACTOR from performing all of the work undertaken, whether of a minor or major nature, and thereby completing the structure or facility in accordance with the Contract Documents.

Within ten (10) days after the CONTRACTOR has given the OWNER or ENGINEER written notice that the work has been completed, or substantially completed, the ENGINEER and/or the OWNER shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract Documents, the OWNER or ENGINEER shall issue to the CONTRACTOR his Certificate of Completion, and thereupon it shall be the duty of the OWNER within ten (10) days to issue a Certificate of Acceptance of the work to the CONTRACTOR or to advise the CONTRACTOR in writing of the reason for non-acceptance.

G.5.7 Affidavit of Bills Paid:

Upon completion of the project and final acceptance by the OWNER, the CONTRACTOR shall furnish the OWNER with an affidavit certifying that all suppliers and subcontractors have been paid, before final payment shall be made by the OWNER.

G.5.8 Final Payment:

Upon the issuance of the Certificate of Completion, the OWNER or ENGINEER shall proceed to make final measurements and prepare a final statement of the value of all work performed and materials furnished under the terms of the Agreement and shall certify same to the OWNER. Thereafter, OWNER shall pay to the CONTRACTOR, on or after the 30th day and before the 35th day, the balance due the CONTRACTOR under the terms of this Agreement, provided he has fully performed his contractual obligations under the terms of this contract and provided the CONTRACTOR has delivered to the OWNER the affidavit of bills paid, and a surety release. Neither the Certificate of Acceptance nor the final

payment, nor any provision in the Contract Documents, shall relieve the CONTRACTOR of the obligation for fulfillment of any warranty which may be required.

G.5.9 Payments Withheld:

The OWNER may, on account of subsequently discovered evidence, withhold or nullify the whole or part of any certificate to such extent as may be necessary to protect himself from loss on account of:

- A. Defective work not remedied.
- B. Claims filed or reasonable evidence indicating probable filing of claims.
- C. Failure of the CONTRACTOR to make payments properly to subcontractors or for material or labor.
- D. Damage to another contractor.
- E. Reasonable doubt that the work can be completed for the unpaid balance for the contract amount.
- F. Reasonable indication the work will not be completed within the contract time.
- G. Failure to submit "as built" drawings as required by the Contract Documents.

When the above grounds are removed or the CONTRACTOR provides a surety bond satisfactory to the OWNER, which will protect the OWNER in the amount withheld, payment shall be made for amounts withheld because of them.

G.5.10 Delayed Payments:

Should the OWNER fail to make payment to the CONTRACTOR of the sum named in any approved partial or final statement, when payment is due, the OWNER shall pay to the CONTRACTOR, in addition to the sum shown as due by such statement, interest thereon at the rate of six (6) percent per annum, unless otherwise specified, from date due as provided under "Partial Payments" and "Final Payments," until fully paid, which shall fully liquidate any injury to the CONTRACTOR growing out of such delay in payment, but the right is expressly reserved to the CONTRACTOR in the event payments be not promptly made, as provided under "Partial Payments," to at any time thereafter treat the contract as abandoned by the OWNER and recover compensation, as provided under "Abandonment of Contract," unless such payments are withheld in accordance with the provisions of "Payments Withheld."

G.6 EXTRA WORK AND CLAIMS:

G.6.1 Change Orders:

Without invalidating this Agreement, the OWNER may, at any time or from time to time, order additions, deletions or revisions to the work; such changes will be authorized by written Change Order prepared by the OWNER for execution by the CONTRACTOR. The Change Order shall set forth the basis for any change in contract price, as hereinafter set forth for Extra Work, and any change in contract time which may result from the change.

In the event the CONTRACTOR shall refuse to execute a Change Order which has been prepared by the OWNER, the OWNER may in writing instruct the CONTRACTOR to proceed with the work as set forth in the Change Order and the CONTRACTOR may make claim against the OWNER for Extra Work involved therein, as hereinafter provided.

G.6.2 Minor Changes:

The OWNER or ENGINEER may authorize minor changes in the work not inconsistent with the overall intent of the Contract Documents and not involving an increase in Contract Price. If the CONTRACTOR

believes that any minor change or alteration authorized by the OWNER or ENGINEER involves Extra Work and entitles him to an increase in the Contract Price, the CONTRACTOR shall make written request to the OWNER or ENGINEER for a written Field Order.

Any request by the CONTRACTOR for a change in Contract Price shall be made in writing in accordance with the provisions of this section prior to beginning the work covered by the proposed change.

G.6.3 Extra Work:

It is agreed that the basis of compensation to the CONTRACTOR for work either added or deleted by a Change Order or for which a claim for Extra Work is made shall be determined by one or more of the following methods:

Method (A)-By agreed unit prices; or Method (B)-By agreed lump sum: or

Method (C)-If neither Method (A) nor Method (B) be agreed upon before the Extra Work is commenced, then the CONTRACTOR shall be paid the "actual field cost" of the work, plus fifteen (15) percent.

In the event said Extra Work be performed and paid for under Method (C), then the provisions of this paragraph shall apply and the "actual field cost" is hereby defined to include the cost to the CONTRACTOR of all workmen, such as foreman, timekeepers, mechanics and laborers, and materials, supplies, teams, trucks, rentals on machinery and equipment, for the time actually employed or used on such Extra Work, plus actual transportation charges necessarily incurred, together with all power, fuel, lubricants, water and similar operating expenses, also all necessary incidental expenses incurred directly on account of such Extra Work, including Social Security Old Age Benefits and other payroll taxes, and, a rateable proportion of premiums on Performance and Payment Bonds and Maintenance Bonds, Public Liability and Property Damage and Workmen's Compensation, and all other insurance as may be required by any law or ordinance, or directed by the OWNER, or by them agreed to. The OWNER or ENGINEER may direct the form in which accounts of the "actual field cost" shall be kept and the records of these accounts shall be made available to the OWNER or ENGINEER. The OWNER or ENGINEER may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used; otherwise these matters shall be determined by the CONTRACTOR. Unless otherwise agreed upon, the prices for the use of machinery and equipment shall be determined by using 100 percent, unless otherwise specified, of the latest schedule of Equipment Ownership Expense adopted by the Associated General Contractors of America. Where practicable the terms and prices for the use of machinery and equipment shall be incorporated in the written Change Order. The fifteen percent (15%) of the "actual field cost" to be paid the CONTRACTOR shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the "actual field cost" as herein defined; save that where the CONTRACTOR'S Camp or Field Office must be maintained primarily on account of such Extra Work, then the cost to maintain and operate the same shall be included in the "actual field cost."

No claim for Extra Work of any kind will be allowed unless ordered in writing by the OWNER or ENGINEER. In case any orders or instructions, either oral or written, appear to the CONTRACTOR to involve Extra Work for which he should receive compensation or an adjustment in the construction time, he shall make written request to the OWNER or ENGINEER for written order authorizing such Extra Work. Should a difference of opinion arise as to what does or does not constitute Extra Work, or as to the payment therefore, and the OWNER or ENGINEER insists upon its performance, the CONTRACTOR shall proceed with the work after making written request for written order and shall keep an accurate account of the "actual field cost" thereof, as provided under Method (C). The CONTRACTOR will thereby preserve the right to submit the matter of payment to a court of general jurisdiction to decide the matter, otherwise the CONTRACTOR shall waive all claims for payment for Extra Work.

G.7 <u>ABANDONMENT OF CONTRACT:</u>

G.7.1 Abandonment by Contractor:

In case the CONTRACTOR should abandon and fail or refuse to resume work within ten (10) days after written notification from the OWNER or ENGINEER, or if the CONTRACTOR fails to comply with the orders of the OWNER or ENGINEER, when such orders are consistent with the Contract Documents, then, and in that case, where performance and payment bonds exist, the Sureties on these bonds shall be notified in writing and directed to complete the work, and a copy of said notice shall be delivered to the CONTRACTOR.

After receiving said notice of abandonment, the CONTRACTOR shall not remove from the work any machinery, equipment, tools, materials or supplies then on the job, but the same, together with any materials and equipment under contract for the work, may be held for use on the work by the OWNER or the Surety on the performance bond, or another contractor in completion of the work; and the CONTRACTOR shall not receive any rental or credit therefore (except when used in connection with Extra Work, where credit shall be allowed as provided for under Section 6, Extra Work and Claims), it being understood that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement.

In case the Surety should fail to commence compliance with the notice for completion hereinbefore provided for, within ten (10) days after service of such notice, then the OWNER may provide for completion of the work in either of the following elective manners:

The OWNER may employ such force of men and use such machinery, equipment, tools, materials and supplies as said OWNER may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to said CONTRACTOR, and expense so charged shall be deducted and paid by the OWNER out of such moneys as may be due, or that may thereafter at any time become due to the CONTRACTOR under and by virtue of this Agreement. In case such expense is less than the sum which would have been payable under this contract, if the same had been completed by the CONTRACTOR, then said CONTRACTOR shall receive the difference. In case such expense is greater than the sum which would have been payable under this contract, if the same had been completed by said CONTRACTOR, then the CONTRACTOR and/or his Surety shall pay the amount of such excess to the OWNER; or

The OWNER under sealed bids, after five (5) days notice published one or more times in a newspaper having general circulation in the county of the location of the work, may let the contract for the completion of the work under substantially the same terms and conditions which are provided in this contract. In the case of any increase in cost to the OWNER under the new contract as compared to what would have been the cost under this contract, such increase shall be charged to the CONTRACTOR and the Surety shall be and remain bound therefore. However, should the cost to complete any such new contract prove to be less than what would have been the cost to complete under this contract, the CONTRACTOR and/his Surety shall be credited therewith.

When the work shall have been substantially completed the CONTRACTOR and his Surety shall be so notified and Certificates of Completion and Acceptance, as provided in Paragraph 5.06 hereinabove, shall be issued. A complete itemized statement of the contract accounts, certified to by the OWNER or ENGINEER as being correct, shall then be prepared and delivered to the CONTRACTOR and his Surety, whereupon the CONTRACTOR and/or his Surety, or the OWNER as the case may be, shall pay the balance due as reflected by said statement, within fifteen (15) days after the date of such Certificate of Completion.

After final completion of the work and in the event the statement of accounts shows that the cost to complete the work is less than that which would have been the cost to the OWNER had the work been completed by the CONTRACTOR under the terms of this contract; or when the CONTRACTOR and/or his Surety shall pay the balance shown to be due by them to the OWNER, then all machinery, equipment,

tools, materials or supplies left on the site of the work shall be turned over the CONTRACTOR and/or his Surety. Should the cost to complete the work exceed the contract price, and the CONTRACTOR and/or his Surety fail to pay the amount due the OWNER within the time designated hereinabove, and there remains any machinery, equipment, tools, materials or supplies on the site of the work, notice thereof, together with an itemized list of such equipment and materials, shall be mailed to the CONTRACTOR and his Surety at the respective addresses designated in this contract; provided, however, that actual written notice given in any manner will satisfy this condition. After mailing, or other giving of such notice, such property shall be held at the risk of the CONTRACTOR and his Surety subject only to the duty of the OWNER to exercise ordinary care to protect such property. After fifteen (15) days from the date of said notice the OWNER may sell such machinery, equipment, tools, materials or supplies and apply the net sum derived from such sale to the credit of the CONTRACTOR and his Surety. Such sale may be made at either public or private sale, with or without notice, as the OWNER may elect. The OWNER shall release any machinery, equipment, tools, materials, or supplies, which remain on the work, and belong to persons other than the CONTRACTOR or his Surety, to their proper owners.

G.7.2 Abandonment by Owner:

In case the OWNER shall fail to comply with the terms of this contract within ten (10) days after written notification by the CONTRACTOR, then the CONTRACTOR may suspend or wholly abandon the work, and may remove therefrom all machinery, tools and equipment, and all materials on the site of work that have not been included in payments to the CONTRACTOR and have not been wrought into the work. Thereupon the ENGINEER shall make an estimate of the total amount earned by the CONTRACTOR, which estimate shall include the value of all work actually completed by said CONTRACTOR, the value of all partially completed work at a fair and equitable price, and the amount of all Extra Work performed at the prices agreed upon, or provided for by the items of this contract, and a reasonable sum to cover the cost of any provisions made by the CONTRACTOR to carry the whole work to completion and which cannot be utilized. The ENGINEER shall then make a final statement of the balance due the CONTRACTOR by deducting from the above estimate all previous payments by the OWNER and all other sums that may be retained by the OWNER under the terms of this Agreement and shall certify same to the OWNER who shall pay to the CONTRACTOR on or before thirty (30) days after the date of delivery to OWNER of such certified final statement.

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SECTION I – SUPPLEMENTAL CONDITIONS

I.1 SCOPE OF WORK:

The work to be done under this contract includes the furnishing of all superintendence, labor, material, transportation, tools, supplies, plant, equipment, and appurtenances necessary for the complete construction of all improvements shown on the map, which are made a part of these specifications.

I.2 PERMITS, CERTIFICATES, AND LICENSES:

The Contractor shall, at his own expense, procure any and all permits, certificates, and licenses required of him by law for the execution of his work. The Owner will furnish permits from the Texas State Highway Department and railroad companies for crossing their properties with utility extensions if such are required.

I.3 MANUFACTURER'S CERTIFICATES:

All manufacturer's certificates required herein are to be furnished by the Contractor at his own expense.

I.4 SALES TAX:

Clarification of the new State Law has not been obtained from the State Comptroller's office at the time of bidding for this project. If exemption cannot be obtained by the Contractor in purchasing materials for this project, the City of Frisco, will compensate the Contractor for sales tax providing that all appropriate sales receipts are submitted with the request for compensation. The request for sales tax compensation shall be submitted with the Contractor's request for final payment.

NOTE: Bidders should not include sales tax in their proposal. The breakdown of materials and other costs shown in the bid proposal shall be completed by the Contractor.

I.5 CALENDAR DAY:

"Calendar Day" is any day of the week or month, no days being excepted. Working days under a calendar day contract will be, Monday through Friday. No work other than clean-up will be allowed during weekends without written permission. No credit will be given for delays due to weather.

I.6 BOUNDARIES OF WORK:

The Owner will provide land and rights-of-way for the work specified in this contract and make suitable provisions for ingress and egress and the Contractor shall not enter on or occupy with men, tools, equipment, or materials, any ground outside the property of the Owner without the written permission of the Owner of such ground. Other contractors and employees or agents of the Owner may for all necessary purposes enter upon the work and premises used by the Contractor, and the Contractor shall conduct his work so as not to impede unnecessarily any work being done by others on or adjacent to the site.

I.7 <u>SHOP DRAWINGS:</u>

The Contractor shall submit four (4) sets of all shop and/or construction drawings to the Consulting Engineer. These shall be approved by the Consulting Engineer prior to any work being undertaken. "As Built" drawings shall be furnished to the Engineer prior to final acceptance of the project.

I.8 <u>DISPOSAL OF SURPLUS MATERIALS:</u>

Surplus material not required for other parts of the work and not otherwise specifically covered by the drawings or specifications shall become the property of the Contractor for proper disposal by him.

I.9 LINE AND GRADE:

The Contractor will furnish a control benchmark and a reference line for the construction of the various lines. The Contractor shall use the control benchmark and reference line and data shown on the as built drawings. No construction staking will be provided by the Engineer or owner for this project. Any restaking, and all construction staking, required shall be at the sole cost of the Contractor.

I.10 PROTECTION OF SITE:

The Contractor shall protect all structures, walks, pipe lines, trees, shrubbery, lawns and other improvements during the progress of his work and shall remove from the site all debris and unused materials.

I.11 INTENT OF PLANS AND SPECIFICATIONS:

The intent of the plans and specifications is to prescribe a complete work or improvement, which the Contractor undertakes to do in full compliance with the plans, specifications, special provisions, proposal and contract. The Contractor shall do all work as provided in the plans, specifications, special provisions, proposal and contract, and shall do such additional extra work as may be considered necessary to complete the work in satisfactory and acceptable manner. The Contractor shall furnish all labor, tools, materials, machinery, equipment and incidentals necessary to the satisfactory prosecution and completion of the work.

I.12 ARRANGEMENT OF SPECIFICATIONS:

The inclusion of any particular specifications in each individual section of these specifications does not indicate that it is applicable only to work specified within that Section. For any particular item of work on any type of project, the specification describing that item shall govern regardless of the Section of these specifications within which it is included. The specifications included herein are grouped together into various sections for convenience only and not for the purpose of restricting the applicant of any specification.

I.13 **QUANTITIES:**

The quantities of each item on the bid proposal blank represent the approximate amount of work to be done. Final quantities actually built will be determined and paid for by actual measurements on the ground of the final work completed. Bidders are especially notified that no incidental items of work will be paid for unless there appears an item in the proposal blank for such work. It must be strictly understood that the prices bid are for complete and acceptable work.

I.14 FIELD CHANGES:

No change in the plans and/or specifications is contemplated; however, should a change be necessary, the Owner reserves the right to make such changes, unless it can be clearly shown that such change works an undue hardship on the Contractor. No extra compensation will be allowed the Contractor.

I.15 ENGINEER:

The word "Engineer" in these specifications shall be understood as referring to <u>City of Frisco Engineering</u> <u>Services, 6101 Frisco Square Blvd. 3rd Floor, Frisco, Texas 75034</u>, Engineer of the Owner, or such other Engineer, Superintendent, or Inspector as may be authorized by said Owner to act in any particular.

I.16 DETAIL PROPOSAL:

Where necessary, detail proposal for construction will be herewith and made a part of these specifications, the same as if they were written herein. The Contractor, awarded the contract, will be furnished with two (2) sets of contract document. Photocopies are not permitted.

I.17 SITE INVESTIGATION:

The information shown on the documents regarding existing utilities, topography, contours, and subsurface soils, and any quantities based thereon, is furnished solely for the convenience of the Contractor as the best information available at this time. The accuracy of this information is not guaranteed and its use in no way relieves the Contractor or others of any responsibility for loss due to inaccuracies or deviations there from which may be encountered.

The Contractor shall carefully examine the site and satisfy himself about all conditions which can in any way affect the work or the cost thereof. The Contractor shall be required to take over the site, execute the work, and deliver the completed project in accordance with the proposals and specifications.

Prospective bidders shall make a careful examination of the site of the project, soil and water conditions to be encountered, improvements to be protected, disposal sites for surplus material not designated to be salvage materials, and as to methods of providing ingress and egress to private properties.

Bidders shall rely exclusively upon their own estimates, investigations, tests and other data which are necessary for full and complete information upon which the proposal may be based. Any bidder, by filing his bid, represents and warrants that he has prepared his bid in accordance with the specifications, with full knowledge and understanding of the terms and provisions thereof; that he has reviewed, studied and examined the bid prior to the signing and filing of same, and that he was cognizant of the terms of his proposal, verified his calculations, and found them to be correct, and agrees to be bound thereby.

I.18 RIGHT-OF-WAY AND EASEMENTS:

The Owner will obtain all access to all necessary right-of-ways and easements required for the completion of this project. No work shall be undertaken by the Contractor until cleared by the Owner as to available right-of-way. All sidewalks shall be constructed inside the existing right-of-way. If Contractor wants to work off easement and is able to make an agreement with the Property Owner, then the agreement should be documented and signed by the Property Owner and Contractor with a copy submitted to the Engineer before work off the easement commences.

I.19 MATERIALS AND CONSTRUCTION METHOD:

The detail specifications herein are including the same materials and methods of construction and the applicable parts of each section shall apply to the project.

I.20 SEQUENCE OF CONSTRUCTION:

Prior to commencing construction of the project, the Contractor shall furnish for approval to the Engineer a tentative construction schedule showing the Contractor's intended sequence of work detailing the critical path method, and in a form compatible with Primavera Suretrak, together with approximate dates for commencing and finishing the principle units of work. The Contractor shall also furnish the Engineer a schedule of projected monthly pay estimates to assist the Owner in the management of project funds and to ensure a timely response to Contractor monthly invoices.

I.21 MATERIALS AND WORKMANSHIP AND "OR EQUAL" CLAUSE:

No material which has been used by the Contractor for any temporary purpose whatever is to be incorporated in the permanent structure without written consent of the Engineer.

Where materials or equipment are specified by a trade or brand name, it is not the intention of the Owner to discriminate against an equal product or another manufacturer, but rather to set a definite standard of quality or performance and to establish an equal basis for the evaluation of bids. Where the words "equivalent", "proper", or "equal to" are used, they shall be understood to mean that the article or process is equal, in the opinion or judgment of the Engineer, to the article or process specified by name. Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. Notwithstanding that the words "or equal to" or other such expressions are used in the specifications; the material, manufactured article, or process specifically designated shall be used unless a substitute shall be approved in writing by the Engineer, and the Engineer shall have the right to require the use of such specifically designated material, article or process.

The Contractor shall furnish all materials for a complete job as shown on the proposal and as required by the specifications.

I.22 SAMPLES AND TESTING OF MATERIALS:

Where, in the opinion of the Engineer, or as called for in the specifications, tests of materials are necessary, such tests will be made at the expense of the Contractor unless otherwise provided. The failure to make any tests of materials shall in no way relieve the Contractor of his responsibility of furnishing materials conforming to the specifications.

Tests, unless otherwise specified, will be made in accordance with the latest methods of the American Society for Testing and Materials. The Contractor shall provide such facilities as the Engineer may require for collecting and forwarding samples and shall not use the materials represented by the samples until tests have been made. The Contractor shall furnish adequate samples without charge.

I.23 <u>TESTING, INSPECTION AND CONTROL:</u>

Testing and inspection of materials required by these specifications shall be performed by a commercial testing laboratory selected by the Contractor and approved by the Owner. Except as otherwise noted, the costs of laboratory tests will be paid by the Contractor. Any testing of material or workmanship required due to failure will be paid for by the Contractor. This payment will be made direct to the testing laboratory by the Contractor.

The Contractor shall furnish, at his own expense, materials or specimens for testing.

The Contractor shall furnish at his own expense, suitable evidence that the materials he proposes to incorporate into the work are in accordance with the specifications. Mill tests for reinforcing steel and cement will be acceptable if it is definite that the test sheets apply to the material being furnished. Manufacturer's or supplier's test results will be acceptable for such items as pipe, valves, hydrants when it is definite that the material being furnished is in accordance with the manufacturer's or supplier's specifications to which the test results apply. Supplier's evidence of quality and gradation of asphaltic material will be acceptable as long as the material is secured from the sources to which the evidence applies.

Should the Contractor fail to provide the above information, the Engineer shall have the right to require tests to be made by the Owner's laboratory to obtain this information and the cost therefore shall be borne by the Contractor.

The Engineer may have further inspection and tests made by the laboratory or may make tests himself,

to insure that the Contractor is complying with the specifications. The correction or removal of such unsatisfactory work and the replacement with satisfactory work shall be performed by the Contractor at his own expense, and is understood to be fully included in his contractor requirements, without any additional compensation or claims upon the Owner or Engineer.

I.24 STORAGE OF MATERIALS:

Materials shall be stored so as to ensure the preservation of their quality and fitness for the work. When directed by the Engineer, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground, and shall be placed under cover when directed. Stored materials shall be placed and located so as to facilitate prompt inspection.

I.25 SOURCE OF SUPPLY OF MATERIALS:

The materials shall be the best procurable, as required by the plans, specifications and special provisions. The Contractor shall not start delivery of materials until the Engineer has approved the source of supply. Only materials conforming to these specifications shall be used in the work and such materials shall be used only so long as the quality of said materials remains equal to the requirements of the specifications.

The Contractor shall furnish approved materials from other sources, if for any reason the product from any source at any time before commencement or during the prosecution of the work proves unacceptable. After approval, any material which has become mixed with or coated with dirt or any other foreign substances during its delivery and handling will not be permitted to be used in the work.

I.26 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK AND MATERIALS:

All work which has been rejected or condemned shall be repaired or if it cannot be repaired satisfactorily, it shall be removed and replaced at the Contractor's expense. Defective materials shall be immediately removed from the site of the work. Work done without line and grade having been given, work done beyond the lines or not in conformity with the grades shown on the plans or as given, save as herein provided, work done without proper inspection, or any extra or unclassified work done without written authority and prior agreement in writing as to prices, shall be done at the Contractor's risk, and will be considered unauthorized, and, at the option of the Engineer, may not be measured and paid for, and may be ordered removed at the Contractor's expense. Upon failure of the Contractor to repair satisfactorily or to remove and replace, if so directed, rejected, unauthorized or condemned work or materials immediately after receiving notice from the Engineer, the Engineer will, after giving written notice to the Contractor, have the authority to cause defective work to be remedied or removed and replaced, or to cause unauthorized work to be removed and to deduct the cost thereof from any monies due or to become due the Contractor.

I.27 MEASUREMENT AND PAYMENT:

Measurement and payment for the various bid items will be made in accordance with the item as set up in the Proposal. Quantities stated in the Proposal are approximate and are to be used only as a basis for estimating the probable cost of work. The Contractor will only be paid for the actual amount of work done and the material furnished. The Contractor will make no claim for damages, restocking or anticipated profits caused by any differences found between the quantities of work actually done and the estimated quantities in the Proposal. The Owner also reserves the right to delete portions of this project. If a portion of work is deleted, no claim can be filed for damages, restocking or anticipated profits. Any quantities added to this project will be paid for at the unit price bid for that item.

I.28 TRENCH EXCAVATION PROTECTION:

This item shall govern for the Trench Excavation Protection required for the construction of all trench excavation protection systems to be utilized in the project and including all additional excavation and

backfill necessitated by the protection system.

A trench shall be defined as a narrow excavation made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench is not greater than 15 feet (15'). In some instances, trenches greater than 15 feet (15') in width may need trench excavation protection and will be included as work under this item.

Trench Excavation Protection shall be accomplished as required by the provisions of, <u>Part 1926, Sub-part P-Excavations</u>, <u>Trenching</u>, and <u>Shoring of the Occupational Safety and Health Administration's Standards and Interpretations</u>.

It is the sole duty, responsibility, and prerogative of the Contractor, not the Owner or Engineer, to determine the specific applicability of a trench safety system to each field condition encountered on the project. It will be the Contractor's responsibility to identify the soil type and to accurately adjust his trench safety methods according to the OSHA requirements.

The Contractor shall indemnify and hold harmless the Owner, its employees and agents, from any and all damages, costs (including, without limitation, legal fees, court costs, and the cost of investigation), judgments or claims by anyone for injury or death of persons resulting from the collapse or failure of trenches constructed under this contract.

The Contractor acknowledges and agrees that this indemnity provision provides indemnity for the Owner in case the Owner is negligent either by act or omission in providing for trench safety, including, but not limited to, inspections, failure to issue stop work orders, and the hiring of the Contractor.

Trench Excavation Protection shall be measured by the linear foot along the center line of trench where the depth of trench exceeds 5 feet (5').

Payment for Trench Excavation Protection, measured as prescribed above shall be made at the unit price bid per linear foot of "Trench Excavation Protection" as outlined in the Proposal.

Payment shall include all components of the Trench Protection System which can include, but not be limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, dewatering or diversion of water to provide adequate drainage. Payment shall also include the additional excavation and backfill required, any jacking, jack removal, and removal of the trench supports after completion.

Payment of all work prescribed under this item shall be full compensation for all excavation and backfill; for furnishing, placing and removing all shoring, sheeting, or bracing; for de-watering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

I.29 SAFETY:

All equipment furnished and installed on this project shall be manufactured and installed in accordance with the applicable parts of the Williams-Steiger Occupational Safety and Health Act of 1970, and its subsequent amendments and revisions. All work shall be performed in accordance with the regulations and requirements of the above noted Act, revisions and amendments.

I.30 RIGHTS OF VARIOUS INTERESTS:

Wherever work being done by the Owner's forces or by other Contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Engineer, to secure the completion of the various portions of the work in general harmony.

I.31 <u>SEPARATE CONTRACTS:</u>

The Owner reserves the right to let other contracts in connection with this work, or to perform work with its own forces. This Contractor shall afford other Contractors or the Owner reasonable opportunity for the introduction and storage of their materials and the execution of their work, and where required, shall properly connect and coordinate his work with theirs.

I.32 SPECIFICATIONS:

Titles to divisions and paragraphs in these Contract Documents are introduced merely for convenience and are not to be taken as part of these specifications and are, furthermore, not to be taken as a correct and complete segregation of the several units of material and labor. No responsibility, either direct or implied, is assumed by the Engineer for omissions or duplications by the Contractor or his sub-contractors, due to real or alleged error in arrangement of matter in these Contractor Documents.

I.33 ADDENDA:

Any addenda issued in writing by the Engineer during the period of bidding shall be covered in the proposal and in executing the Contract, such addenda shall become a part thereof and modify the specifications and/or the drawings accordingly. Verbal changes in the work, made during the time of bidding will not be binding.

I.34 CONFLICTS

In the event of conflicts between the proposal and specifications, the specifications and Contract Documents shall prevail over the plans. In the event of conflict between the various sections of the specifications, Section H - Special Specifications shall prevail. Section I - Supplemental Conditions shall prevail over the technical specification sections. In the event of conflict between plan sheets, the larger size, quantity, etc., will prevail.

In the event of conflicts between methods of measurement and payment for the various items of work between the Proposal and the Specifications, the Proposal shall prevail.

I.35 LAWS TO BE OBSERVED:

The Contractor shall at all times observe and comply with all Federal and State laws, the City ordinances and regulations, which in any manner affect the conduct of the work and shall observe and comply with all orders, laws, ordinances and regulations which exist or which may be enacted later by bodies having jurisdiction or authority for such enactment.

No pleas of misunderstanding or ignorance thereof will be considered. The Contractor and his sureties shall indemnify and save harmless the Owner and all its officers, agents and employees against any claims or liability arising from or based on the violation of any such law, ordinance, regulation or order whether by himself or employees.

I.36 PATENTED DEVICES, MATERIALS AND PROCESSES:

The Contractor shall pay all royalties and license fees, and shall provide for the use of any design, device, material or process covered by letters, patent or copyright by suitable legal agreement with the patentee or Owner. The Contractor shall defend all suits or claims or infringement of any patent or copyright rights and shall indemnify and save the Owner harmless from any loss on account thereof, except that the Owner shall defend all such suits and claims and shall be responsible for all such loss when a particular design, device, material or process or the product of a particular manufacturer or manufacturers is specified or required by the Owner. If the Contractor has information that any such design, device, material or process specified or required by the Owner is an infringement; he shall be responsible for such loss unless he promptly gives such information to the Owner.

I.37 SANITARY PROVISIONS:

The Contractor shall establish and enforce among his employees such regulations in regard to cleanliness and disposal of garbage and waste as will tend to prevent the inception and spread of infections or contagious diseases and to prevent effectively the creation of a nuisance about the work on any property either public or private, and such regulations as are required by the Engineer shall be put into immediate force and effect by the Contractor.

The necessary sanitary facilities, properly secluded from public observation, for the use of employees of the Contractor, other laborers on the work, inspector(s) and Engineer, shall be constructed and maintained by the Contractor in such a manner and at such points as will be approved by the Engineer, and their use shall be strictly enforced by the Contractor. They shall be well ventilated, but provide concealment, and shall be kept scrupulously clean at all times by the Contractor. The facilities shall be removed and the site restored to its original condition upon completion of the work. All such facilities shall conform to the requirements of State and local health authorities, ordinances, and law. All sanitary laws and regulations of the State of Texas and the Owner shall be within strict compliance.

"Porta Can" or other similar facilities which may be rented from commercial concerns will be applicable.

I.38 PUBLIC CONVENIENCE AND SAFETY:

Materials stored about the work shall be so placed, and the work shall at all times to be so conducted, as to cause no greater obstruction to the traveling public than is considered necessary by the Engineer. The Contractor shall make provisions by bridges or otherwise at all cross streets, highways, sidewalks, and private driveways for the free passage of pedestrians and vehicles provided that where bridging is impractical or unnecessary in the opinion of the Engineer, the Contractor may make arrangements satisfactory to the Engineer for the diversion of traffic and shall, at his own expense, provide all material and perform all work necessary for the construction and maintenance of roadways and bridges for the diversion of traffic. Sidewalks must not be obstructed except by special permission of the Engineer. The materials excavated, and the construction materials or plant used in the construction of the work, shall be placed so as not to endanger the work or prevent free access to all fire hydrants, water valves, gas valves, manholes for the telephone, telegraph, signal or electric conduits, sanitary or storm sewers, and fire alarm or police call boxes in the vicinity.

The Owner reserves the right to remedy any neglect on the part of the Contractor as regards the public convenience and safety which may come to its attention, after twenty-four (24) hours notice in writing the Contractor, save in cases of emergency, when it shall have the right to remedy any neglect without notice; and in either case, the cost of such work done by the Owner shall be deducted from monies due or to become due to the Contractor. The Contractor shall notify the Engineering Services Traffic Department when any street is to be closed or obstructed and must have an approved traffic control plan. Such notice shall in the case of major thoroughfares or streets upon which transit lines operate be forty-eight (48) hours in advance. The Contractor shall, when directed by the Engineer, keep any street or streets in condition for unobstructed use by the City Fire Department. Where the Contractor is required to construct temporary bridges or make other arrangements for crossing over ditches or streams, his responsibility for accidents shall include the roadway approaches as well as the structures of such crossings.

I.39 PRIVILEGES OF CONTRACTOR IN STREETS, ALLEYS, AND RIGHTS-OF-WAY:

For the performance of the contract, the Contractor will be permitted to occupy such portions of streets or alleys, or other public places or other rights-of-way as provided for in the ordinances of the City, as shown on the plans or as permitted by the Engineer. A reasonable amount of tools, materials and equipment for construction purposes may be stored in such space, but not more than is necessary to avoid delays in the construction. Excavated and waste materials shall be piled or stacked in such a way as not to interfere with spaces that may be designated to be left free and unobstructed, nor

inconvenience occupants of adjoining property. Other Contractors may, for all purposes required by their contracts, enter upon the work and premises used by the Contractor and the Contractor shall give to other Contractors of the owner all reasonable facilities and assistance for completion of adjoining work. Any additional grounds desired by the Contractor for his use shall be provided by him at his own cost and expense.

I.40 RAILWAY CROSSINGS:

Where the work encroaches upon any right-of-way of any railway, the Owner will secure the necessary easement for the work. Where railway tracks are to be crossed, the Contractor shall observe all the regulations and instructions of the railway company as to methods of doing the work, or precautions for safety of property and the public. All negotiations with the railway company, except for the right-of-way, shall be made by the Contractor. The railway company shall be notified by the Contractor not less than five (5) days previous to the time of his intentions to begin work. The Contractor will not be paid direct compensation for such railway crossing, but shall receive only the compensation as set out in the proposal.

I.41 BARRICADES, LIGHTS, WATCHMEN AND TRAFFIC CONTROL:

Where the work is carried on, in or adjacent to any street, alley or public place, the Contractor shall at his own cost and expense furnish, provide a traffic control details per TXDOT standards for each location of the project, erect and maintain such barricades, cones, lights and danger signals, shall provide such watchmen, and shall take such other precautionary measures for the protection of persons or property and of the work as are necessary.

All barricades shall be painted in a color that will be visible at night, shall indicate in bold letters thereon the Contractor's name and shall be illuminated by lights from sunset to sunrise. The term "lights", as used herein, shall mean flares, flashers, or both. A sufficient number of barricades shall be erected to keep vehicles from being driven on or into any work under construction. The Contractor shall furnish watchmen in sufficient numbers to protect the work.

The Contractor will be held responsible for all damage to the work due to failure of barricades, signs, lights and watchmen to protect it, and whenever evidence is found of such damage, the Engineer may order the damaged portion immediately removed and replaced by the Contractor at his cost and expense.

The Contractor's responsibility for the maintenance of barricades, signs and lights, and for providing watchmen, shall not cease until the project has been accepted by the Owner.

The Contractor shall at all times coordinate the closing of any section of road with the Engineering Services Traffic Department. All provisions of the Texas Uniform Traffic Control Manual shall be followed by the Contractor on this project.

I.42 <u>USE OF EXPLOSIVES:</u>

The plans and specifications do not require the use of explosives. Should the Contractor elect to use explosives in the prosecution of the work, utmost care shall be exercised so as not to endanger life or property and the Contractor shall use only such methods as are currently utilized by persons, firms, or corporations engaged in a similar construction business. The Contractor shall be solely responsible for the determination as to whether explosives shall be used and for any result from the use of explosives, and shall indemnify and hold the Owner whole and harmless against any claim for damage or injury to person or property, real or personal, as the result of the use of explosives by the Contractor or any subcontractor. The Contractor shall furnish the Owner insurance sufficient to cover any such possibility, which insurance shall either include the Owner as an insured or be of such character as to protect the Owner.

All explosives shall be stored in a safe and secure manner, under the care of a competent watchman at all times and all such storage places shall be marked clearly "DANGEROUS-EXPLOSIVES". The method of storing and handling explosives and highly inflammable materials shall conform with Federal and State laws, City ordinances, and City Fire Department regulations.

The Contractor shall notify each utility company having structures in proximity to the site of the work of his intention to use explosives, and such notice shall be given sufficiently in advance tenable companies to take such steps as they may deem necessary to protect their property from injury. Such notice shall not relieve the Contractor of responsibility for any damage resulting from his blasting operations.

I.43 EXISTING STRUCTURES AND UTILITIES:

The location of existing utilities described on the proposal is based on the interpretation of the best available information and are not warranted by the Engineer. It shall be the responsibility of the Contractor to verify and/or locate the various locations of pertinent utilities prior to or during construction. Any additional unforeseen cost to the Contractor caused by any reason will not be paid for directly, but considered subsidiary to the various bid items.

The proposal show the locations of all known surfaces and subsurface structures. However, the location of many gas mains, water mains, conduits, sewers, irrigation lines, etc., is unknown, and the Owner assumes no responsibility for failure to show any or all of these structures on the plans or to show them in their exact location. It is mutually agreed such failure will not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or requires the building of special work, provisions for which are not made in the plans and proposal, in which case the provisions in these specifications for extra work shall apply. If any utility or irrigation system is broken by the Contractor, it shall be the responsibility of the Contractor to repair, at his own expense, the damaged line and restore it to its functional use.

I.44 <u>CUTTING, PATCHING AND FITTING:</u>

The Contractor shall perform all cutting, patching or fitting of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of others shown on, or reasonably implied by the drawings and specifications for the, complete structure or facility. The Contractor shall not endanger any work by cutting, digging or otherwise, and shall not cut or alter the work of others unless specifically noted on the drawings and specifications or permitted by the Engineer.

I.45 TEMPORARY SEWER AND DRAIN CONNECTIONS:

When existing sewers have to be taken up or removed, the Contractor shall at his own expense provide and maintain temporary outlets and connections for all public or private drains and sewers. The Contractor shall also take care of all sewage and drainage which will be received from these drains and sewers; and for this purpose he shall provide and maintain, at his own expense, adequate pumping facilities and temporary outlets or diversions. The Contractor, at his own expense, shall construct such troughs, pipes, or other structures necessary and be prepared at all times to dispose of drainage and sewage received from these temporary connections until such time as the connections shall be kept in service and maintained under the contract, except where specified or ordered to be abandoned by the Engineer. All water or sewage shall be disposed of in a satisfactory manner so that no nuisance is created and so that the work under construction will be adequately protected.

I.46 ARRANGEMENT AND CHARGE FOR CITY WATER:

Water required for testing and sterilization, and other construction purposes will be available from the Owner, at no cost to the Contractor, except for water required for retesting the piping. The Contractor must, however, furnish all pipe, hose and fittings necessary to obtain the water.

The Contractor shall make complete and satisfactory arrangements with the Owner's City Water Utilities Department prior to using the water. All pipe used for any purpose other than water jetting and similar type uses shall be clean and sterilized.

Water required for retesting piping shall be paid for by the Contractor at a rate as may be established by the Owner. Where meters are used, the charge for water will be at the regular established rate; where no meters are used, the charge will be as prescribed by ordinance, or where no ordinance applies payment shall be made on estimates made by the Owner's City Water Department.

The Engineer will schedule hours the Contractor can obtain water if there is a water supply problem. Hours for jetting and flooding trenches will probably be between 12:00 a.m. midnight and 7:00 a.m.

I.47 USE OF FIRE HYDRANTS:

No person shall open, turn off, interfere with, attach any pipe or hose or connect anything with any fire hydrant, stop valve or stop cock, or tap any water main belonging to the City, unless duly authorized to do so by the City Water Utilities Department.

I.48 USE OF A SECTION OR PORTION OF THE WORK:

Wherever in the opinion of the Engineer any section or portion of the work or any structure is in suitable condition, it may be put into use upon the written order of the Engineer, and such usage shall not be held in any way an acceptance of said work or structure or any part thereof or as a waiver of any acceptance of said work or structure or any part thereof or as a waiver of any of the provisions of these specifications or the contract pending final completion and acceptance of the work; all necessary repairs and removals of any section of the work so put into use; due to defective materials or workmanship or to operations of the Contractor shall be performed by the Contractor at his own expense.

I.49 RISK OF LOSS:

Until written acceptance by the Engineer, as provided for in these specifications, the work shall be under the charge and care of the Contractor and he shall take every necessary precaution to prevent injury or damage to the work or any part thereof by action of the elements or from any other cause whatsoever, whether arising from the execution or non-execution of the work. The Contractor shall rebuild, repair, restore and make good at his own cost and expense, all injuries or damages to any portion of the work occasioned by any of the hereinabove causes.

I.50 CONTRACTOR'S RESPONSIBILITY AND LIABILITY FOR PERFORMANCE OF WORK:

It is expressly understood and agreed to by the Contractor that, regardless of the extent of inspection and supervision provided by the Owner and the Engineer it is the Contractor's responsibility to perform and complete the work in accordance with the drawings and specifications, and that the Owner and Engineer have no liability or responsibility whatever to the Contractor for any work performed by the Contractor which is not in accordance with the drawings and specifications regardless of the time when discovered and whether discovered at any time during the course of construction or after acceptance of the work.

The Engineer shall immediately inform the Contractor of any work that is not in accordance with the drawings and specifications when it becomes known to him. If any work is performed which is not in accordance with the drawings and specifications and is not discovered until a later time, neither the Owner nor the Engineer shall have any responsibility to the Contractor, or be liable to the Contractor for the correction or removal of unsatisfactory work or of any work subsequently performed or affected by it. The correction or removal of such unsatisfactory work and the replacement with satisfactory work shall be performed by the Contractor at his own expense, and is understood to be fully included in his contractor requirements, without any additional compensation or claims upon the Owner or Engineer.

I.51 PROTECTION OF PUBLIC AND PRIVATE PROPERTY:

The plans show as much information as can reasonably be obtained from field surveys and available sources regarding the location and nature of pipe lines, storm sewers, sanitary sewers, water lines, natural gas lines, telephone conduits and underground cables crossing the right-of-way and along the route of the work; however, neither the Owner nor the Engineer assumes responsibility for the correctness or completeness of this information. It shall be the Contractor's responsibility to locate such underground installations sufficiently in advance of construction operations to preclude damage to same, and in the event of damage to underground lines, whether shown on the plans or not, the Contractor shall be required to make, at his own expense, all repairs necessary to place the facility back in service and all repairs so made shall conform in all respects to the requirements of the company or agency servicing the facility.

It shall be the Contractor's responsibility to immediately notify the City Water and Sewer Department of any broken or damaged water or sanitary sewer pipe resulting from the Contractor's operations and to temporarily plug the line until repaired. The Contractor shall also notify the respective companies or agencies owning any other line or facility damaged by him and shall take all necessary safety precautions until the line is repaired.

Buildings or other structures along the route of the work and adjacent to the right-of-way shall be fully protected from damage which might result from the Contractor's operations by shoring or other such means as the circumstances may require. The Contractor shall be responsible for any damage resulting to such buildings or structures and shall be required to repair any damages in such manner as to return the structure to its original condition.

Should any damage to any public or private property result from the Contractor's operations, he shall pay such sums or make such repairs as may be necessary to compensate for the losses. Arrangements for such compensations shall be made directly between the Contractor and the private parties involved.

Telephone, light and power and other poles of similar nature, privately owned signs and similar structures which are not located on private property will be protected by the Owners thereof. However, the Contractor shall not undermine or otherwise endanger such items until the Owners have been notified and have been given reasonable opportunity to take necessary precautions to protect their interests.

Any damage to sidewalks, street pavements, curb and gutter, driveways, drainage structures, street signs, traffic lights or other public or private property, including irrigation systems, caused by the Contractor's operations shall be repaired at the Contractor's expense, unless otherwise provided.

I.52 PROTECTION OF TREES, PLANTS AND SHRUBS:

All trees indicated on the drawings or designated by the Owner to remain shall be protected from damage. Substantially constructed guards or barricades shall be provided as required to protect tree trunks from moving equipment.

The Contractor shall exercise special care to minimize damage to other trees, plants and shrubs along the route of the work. The Owners of trees, plants and shrubs which lie outside the property lines and within the normal limits of work shall be notified by the Contractor before beginning construction operations. The Owners shall be allowed to remove and protect their property, and all such trees, plants and shrubs not so protected by their Owners shall be removed and disposed of by the Contractor.

I.53 NO WAIVER OF LEGAL RIGHT:

Inspection by the Engineer, any order, measurement, or certificate by the Engineer, any order by the Owner for payment of money, any payment for or acceptance of any work, or any extension of time, or any possession taken by the Owner, shall not operate as a waiver of any provisions of the Contract or

any power therein reserved to the Owner of any rights or damages therein provided. Any waiver of any breach of contract shall not be held to be a waiver of any other subsequent breach. The Owner deserves the right to correct any error that may be discovered in any estimate that may have been paid and to adjust the same to meet the requirements of the contract and specifications. The Owner reserves the right to claim and recover by process of law sums as may be sufficient to correct any error or make good any deficiency in the work resulting from such error, dishonesty or collusion, upon the conclusive proof of collusion or dishonesty by the Contractor or his agents and the Engineer or his assistants, discovered in the work after the final payment has been made.

I.54 SAFETY:

All equipment and materials furnished and installed on this project shall be manufactured and installed in accordance with the applicable parts of the Williams-Steiger Occupational Safety and Health Act of 1970 and its subsequent amendments and revisions. All work shall be performed in accordance with the regulations and requirements of the above noted Act, its revisions and amendments.

I.55 COMPETENT WORKMEN:

The Contractor shall employ only competent workmen for the execution of his work and all such work shall be performed under the direct supervision of an experienced superintendent.

I.56 FINAL INSPECTION:

The Engineer will make final inspection of all work included in the contract as soon as practicable after the work is completed and ready for acceptance. If the work is not acceptable to the Engineer at the time of such inspection, he will inform the Contractor as to the particular defects to be remedied before final acceptance will be made.

I.57 <u>CLEAN UP FOR FINAL ACCEPTANCE:</u>

The Contractor shall make a final clean-up of all parts of the work before final acceptance by the Owner. This clean-up shall include, among other things, removal of all objectionable rocks, pieces of concrete, and other construction materials, and in general, preparing the site of the work in an orderly manner true to original grade and appearance.

Disposal is not to be made on adjacent private or public property without written permission filed with the Engineer. If permission is granted by the property owners (public or private) the material so disposed of is to be leveled and left in a condition satisfactory to the Engineer.

I.58 GUARANTEE:

Except as modified by the provisions of Section H - Special Specifications, the Contractor shall guarantee the work which he does defective workmanship and materials for a period of two (2) years from the date of final acceptance of the work by the Owner.

Where defective workmanship and/or materials are discovered requiring repairs to be made under this guarantee, all such repair work shall be done by the Contractor at his own expense within five (5) days after written notice of such defect has been given to him by the Owner. Should the Contractor fail to repair leaks or correct such defective workmanship and/or materials within five (5) days after being notified, the Owner may make the necessary repairs and charge the Contractor with the actual cost of all labor and material required.

I.59 FAILURE TO COMPLETE ON TIME:

The time of completion is the essence of the contract. For each calendar day that any work shall remain uncompleted after the time specified in the proposal and the contract, or the increased time granted by the Owner, or as automatically increased by additional work or materials ordered after the contract is signed, the sum per day given in the following schedule will be deducted from the monies due the Contractor, not as a penalty but as liquidated damages.

Amount of Contract	Amount of Liquidated Damages Per Day
Less than \$ 50,000	\$ 60
\$50,000 to \$1000,000	\$ 150
\$100,000 to \$250,000	\$ 200
\$250.000 to \$500,000	\$ 250
\$500,000 to \$750,000	\$ 300
\$750,000 to \$1,000,000	\$ 400
Over \$1,000,00	\$ 500

This sum of money thus deducted for such delay, failure or non-completion is not to be considered as a penalty, but it shall be deemed, taken and treated as reasonable liquidated damages, since it would be impractical and extremely difficult to fix the actual damages and the Owner may withhold from the Contractor's compensation such sum as liquidated damages.

I.60 INSURANCE:

I.60.1 Policy Endorsements:

Contractors providing good, materials and services for the City of Frisco shall, during the term of the contract with the City or any renewal or extension thereof, provide and maintain the types and amounts of insurance set forth herein. All insurance and certificate(s) of insurance shall contain the following provisions:

Name the City, its officers, agents, representatives, and employees as additional insured as to all applicable coverage with the exception of workers compensation insurance.

Provide for at least thirty (30) days prior written notice to the City for cancellation, non-renewal, or material change of the insurance.

Provide for a waiver of subrogation against the City for injuries, including death, property damage, or any other loss to the extent the same is covered by the proceeds of insurance.

I.60.2 Insurance Company Qualifications:

All insurance companies providing the required insurance shall be authorized to transact business in Texas and rated at least "A" by AM Best or other equivalent rating service

I.60.3 Certificate of Insurance:

A certificate of insurance evidencing the required insurance shall be submitted with the contractor's bid or response to proposal. If the contract is renewed or extended by the City a certificate of insurance shall also be provided to the City prior to the date the contract is renewed or extended

I.60.4 Insurance Requirements:

General Liability insurance for personal injury (including death) and property damage with a minimum of

\$1 Million Dollars per occurrence and \$2 Million Dollars aggregate, including advertising injury, products coverage and (XCU) explosion, collapse and underground (If high risk or dangerous activities). Umbrella Coverage or Excess Liability Coverage of \$2 Million Dollars Statutory. Workers compensation insurance as required by state law.

I.60.5 Special Conditions:

- A. Concerning insurance to be furnished by Contractor, is a condition precedent to acceptability thereof that:
 - 1. Any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by Contractor. The Owner's decision thereon shall be final; and
 - 2. All policies are to be written through companies duly authorized to transact that class of insurance in the State of Texas.

B. Contractor agrees to the following:

- Contractor hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the Owner, it being the intention that the insurance policies shall protect all parties to the contract and be primary coverage for all losses covered by the policies;
- Companies issuing the insurance policies and Contractor shall have no recourse against the Owner for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the Contractor;
- 3. Approval, disapproval or failure to act by the Owner regarding any insurance supplied by the Contractor (or any subcontractors) shall not relieve the Contractor of full responsibility or liability for damages and accidents as set forth in the contract documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the Contractor from liability; and
- 4. No special payments shall be made for any insurance that the Contractor and subcontractors are required to carry; all are included in the contract price and the contract unit prices.

Any of such insurance policies required under this section may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

I.60.6 Proof of Carriage of Insurance:

The Contractor shall furnish the Owner with certificates showing type, amount, class of operations covered, effective dates, dates of expiration of policies, and proof of compliance with previously stated requirements.

I.61 TERMINATION OF CONTRACT IN CASE OF NATIONAL EMERGENCY:

Whenever, because of a national emergency, so declared by the President of the United States or other lawful authority, it becomes impossible for the Contractor to obtain all of the necessary labor, material and equipment for the prosecution of the work with reasonable continuity for a period of two (2) months, the Contractor shall within seven (7) days notify the Owner in writing, giving a detailed statement of the efforts which have been made and listing all necessary items of labor, material and equipment not obtainable. If, after investigation, the Owner finds that such conditions exist and that the inability of the Contractor to proceed is not attributable in whole or in part to the fault or neglect of the

Contract, then if the Owner cannot after reasonable effort assist the Contractor in procuring and making available the necessary labor, materials, and equipment within thirty (30) days, the Contractor may request the Owner to terminate the contract and the Owner shall within thirty (30) days comply with the request, and the termination shall be based on a final settlement, which shall include, but not be limited to, the payment for all work executed.

I.62 ABBREVIATIONS:

Whenever the abbreviations defined herein occur on the plans, in the specifications, contract, bonds, advertisement, proposal, or in any other document or instrument herein contemplated or to which the specifications apply or may apply, the intent and meaning shall be as follows:

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
ADDICETATION	DEGGREE 120.1		
A.A.S.H.O.	American Association of State Highway Officials	H.S.	Horseshoe
A.P.I.	American Petroleum Institute	In., in. or "	Inch or Inches
A.R.E.A.	American Railway Engineering Association	Lb. or lb.	Pound
A.S.A.	American Standards Association	м.н.	Manhole
A.S.T.M.	American Society for Testing and Materials	Max.	Maximum
A.W.S.	American Welding Society	Min.	Minimum
A.W.W.A.	American Water Works Association	Mono.	Monolithic
Asph.	Asphalt	No.	Number
Ave.	Avenue	%	Percent
Blvd.	Boulevard	PSI or p.s.i.	Pounds per square inch
C.I.	Cast Iron	R.	Radius
C.L.	Center Line	Reinf.	Reinforced
C.O.	Cleanout	Rem.	Remove
Conc.	Concrete	Rep.	Replace
Cond.	Conduit	R/W, R.O.W. or R. of W.	Right-of-Way
Corr.	Corrugated	Sani.	Sanitary
Cu.	Cubic	Sq.	Square
Culv.	Culvert	Std.	Standard
Dia.	Diameter	St.	Street, Storm or Strength
Dr. or Drwy.	Driveway	T.H.D.	Texas Highway Department
Elev.	Elevation	Vol.	Volume
F.	Fahrenheit	Yd.	Yard

In reference to such abbreviations as A.S.T.M., A.W.W.A., etc., where a specification number is referred to, the latest revision of said specification shall apply.